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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,174	12/22/2003	Timothy J. Blenke	KCC 4931 (K-C 18,579)	7750

321 7590 08/10/2005

SENNIGER POWERS LEAVITT AND ROEDEL  
ONE METROPOLITAN SQUARE  
16TH FLOOR  
ST LOUIS, MO 63102

EXAMINER

JACKSON, MONIQUE R

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/743,174

Applicant(s)

BLENKE ET AL.

Examiner

Monique R. Jackson

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-92 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-92 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/04 &amp; 3/05 (4)</u> . | 6) <input type="checkbox"/> Other: ____.  |

Art Unit: 1773

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10, 13, 16, 17, 19, 22-33, 36, 39, 40, 42, 45-56, 59, 62, 63, 65, 68-79, 82, 85, 86, 88, and 91-92 are rejected under 35 U.S.C. 102(b) as being anticipated by Zhou et al (USPN 6,774,069 published as 2002/0123726A1 on 9/5/02.) Zhou et al teach a laminated structure and a process of making the laminated structure wherein the laminate comprises a first substrate and a second substrate bonded via an adhesive composition comprising an atactic polypropylene and an isotactic polypropylene wherein Zhou et al teach that the substrates, the atactic polymer, the isotactic polymer and the adhesive composition are the same as the instantly claimed invention including degree of crystallinity, number-average molecular weight, melt index, hot-melt processability temperature, weight percentages, and additives; wherein Zhou et al specifically teach producing the laminate by ultrasonically bonding the first substrate to the second substrate via the adhesive composition (Claims; Col. 12, lines 17-48; Col. 2, lines 17-31; Col. 4, lines 33-62; Col. 7, line 33-Col. 8, line 2; Col. 16, lines 1-11.)

3. Claims 1-17, 19, 22-40, 42, 45-63, 65, 68-86, 88, and 91-92 are rejected under 35 U.S.C. 102(b) as being anticipated by Zhou et al '538 (US2002/0123538A1.) Zhou et al '538 teach a laminated structure and a process of making the laminated structure wherein the laminate

Art Unit: 1773

comprises a first substrate and a second substrate bonded via an adhesive composition comprising an atactic polymer and an isotactic polymer wherein Zhou et al teach that the substrates, the atactic polymer, the isotactic polymer and the adhesive composition are the same as the instantly claimed invention including degree of crystallinity, number-average molecular weight, melt index, hot-melt processability temperature, weight percentages, substrate materials, and additives; wherein Zhou et al specifically teach producing the laminate by ultrasonically bonding the first substrate to the second substrate via the adhesive composition (Claims; Paragraphs 0067, 0068, 0071, 0072, 0087.)

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11-12, 14-15, 18, 20, 21, 34-35, 37-38, 41, 43, 44, 57-58, 60-61, 64, 66, 67, 80-81, 83-84, 87, 89, and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhou et al (2002/0123726A1.) The teachings of Zhou et al are discussed above. Zhou et al do not teach that the atactic polymer is LDPE, polystyrene or polybutene; that the isotactic polymer is HDPE, polystyrene or polybutene; or that the first and second substrates may be formed of polyester, polylactic acid, or nylon as instantly claimed. However, the atactic and isotactic polyolefins of the instant claims are known functionally equivalent stereoregular polyolefins to the stereoregular polypropylenes of the invention taught by Zhou et al and would have been obvious to one having ordinary skill in the art at the time of the invention. Further, Zhou et al teach that a

Art Unit: 1773

variety of materials may be utilized as the two substrates to be bonded and though Zhou et al do not specifically teach the above cited thermoplastic materials, these polymers are functionally equivalent thermoplastics to polypropylene and other polyolefin substrates utilized in the art and one skilled in the art at the time of the invention would have been motivated to determine suitable thermoplastic substrate materials based on the desired end use of the laminated structure.

6. Claims 18, 20, 21, 41, 43, 44, 64, 66, 67, 87, 89, and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhou et al '538. The teachings of Zhou et al '538 are discussed above. Zhou et al '538 teach that a variety of materials may be utilized as the two substrates to be bonded and though Zhou et al do not specifically teach the above cited thermoplastic materials, these polymers are functionally equivalent thermoplastics to polypropylene and other polyolefin substrates utilized in the art and one skilled in the art at the time of the invention would have been motivated to determine suitable thermoplastic substrate materials based on the desired end use of the laminated structure.

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 1773

8. Claims 1-92 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-70 of U.S. Patent No. 6,774,069. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one having ordinary skill in the art at the time of the invention to combine dependent claim limitations and to utilize ultrasonic bonding to produce the laminated substrate. Further, it would have been obvious to one having ordinary skill in the art to utilize functionally equivalent stereoregular polyolefins to the stereoregular polypropylene of the patent and to utilize any suitable thermoplastic material based on the desired end use of the laminated structure.

9. Claims 1-92 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-113 of copending Application No. 10/744,332. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one having ordinary skill in the art at the time of the invention to combine dependent claim limitations and to select from any combination of the substrate materials claimed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 1-92 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-104 of copending Application No. 10/743,222. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one having ordinary

Art Unit: 1773

skill in the art at the time of the invention to combine dependent claim limitations and to select from any combination of the substrate materials claimed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 1-92 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-97 of copending Application No. 10/260,951. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one having ordinary skill in the art at the time of the invention to combine dependent claim limitations and to utilize ultrasonic bonding to produce the laminated substrate. Further, it would have been obvious to one having ordinary skill in the art to select any combination of the substrate materials claimed in the copending application or to utilize functionally equivalent polyolefin or thermoplastic substrate materials based on the desired end use of the laminated structure.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claims 1-92 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-69 of copending Application No. 10/945,239. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one having ordinary skill in the art at the time of the invention to combine dependent claim limitations and to utilize ultrasonic bonding to produce the laminated substrate. Further, it would have been obvious to one having ordinary skill in the art to select any combination of the substrate materials claimed

Art Unit: 1773

in the copending application or to utilize functionally equivalent polyolefin or thermoplastic substrate materials based on the desired end use of the laminated structure.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Monique R. Jackson  
Primary Examiner  
Technology Center 1700  
August 8, 2005